



Hanford Advisory Board

DRAFT MEETING MINUTES

HANFORD ADVISORY BOARD (HAB, Board)

River and Plateau Committee (RAP)

August 10, 2021

Virtual Meeting via Microsoft Teams

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<p><i>This is only a summary of issues and actions discussed at this meeting. It may not represent the fullness of represented ideas or opinions, and it should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.</i></p>

Opening

Ruth Nicholson, HAB Facilitator, welcomed meeting participants and notified the participants that the meeting was being recorded.

Gary Younger, US Department of Energy (DOE), announced that this meeting was being held in accordance with the Federal Advisory Committee Act. Ruth provided an overview of the meeting agenda.

Tom Sicilia, Oregon Department of Energy and RAP Chair, called for a review of the RAP meeting minutes for the May 11, 2021 meeting. Committee members provided minimal comments, with those provided focusing on the attendee listing. It was agreed those would be reviewed prior to finalization.

Ruth announced that HAB committees and Issue Manager (IM) teams were established in Microsoft Teams, providing members discussion space to explore HAB and committee topics. Joshua Patnaude, HAB Facilitation Team, provided a short demonstration focusing on Teams navigation and functions.

100K Area Remediation

Manuel Lopez, DOE, provided a presentation on 100K Area remediation activities. He started his presentation with a safety topic related to hot weather safety, focusing on the signs of heat stress or heat exhaustion.

The presentation was intended to provide an update on 100K Area remediation activities underway on the Hanford Site, including the deactivation, remediation, and eventual Safe Storage Enclosure of the remaining reactors in the 100 Area. He provided an overview of the progress to date, from the initial K East and K West reactor operation to the ongoing soil remediation efforts in K East.

Manuel provided an overview of the 105KW Basin Deactivation Project. He provided a schematic that showed locations of garnet filters and planned vertical pipe casing (VPC) installations. He noted that certain areas of the facility are above grade, while hazardous materials are stored underwater. The basins were rectangular with dimensions of 125 feet by 67 feet, and 20 feet in depth. They typically contained about one million gallons of water and were filled to the 16-foot level for worker shielding. Work was performed from above grade, 20 feet above hazardous materials.

He reviewed the process from KW basin removal and interim safe storage, from initial basin deactivation through long-term stewardship. Deactivation began with garnet filter media retrieval. The retrieved media, primarily consisting of garnet and sand, would be transferred to Sludge Transport and Storage Containers (STSCs) and shipped to the T Plant. VPCs would contain high-dose material and remain in place for later removal following above grade demolition of the basin. Designs for VPCs were based off those successfully used at the 618-10 site. The team worked with Bauer Engineering for performance testing using full-scale mockups loaded with general materials such as pipes and paint can lids, which were then augered with the

intention of homogenizing the contained material. The mockups were successful in loading, grouting, and augering tests.

Moving on, Manuel provided updates on the 100K Area facility demolition activities. Demolition of the 166KE/AKE oil storage bunker and 165KE powerhouse were completed earlier in 2021, with 165KW expected to begin demolition by October 1, 2021. Soil remediation was ongoing at multiple active waste sites across the 100 Area.

An interim safe storage measure was designed for use on the remaining reactors. It was expected that the new design would prevent both animal and weather infiltration while serving as a security measure against unauthorized access.

Regulatory Perspectives

Roberto Armijo, US Environmental Protection Agency (EPA), noted that related briefings were recently provided to the EPA Office of Land and Emergency Management Deputy Assistant Administrator and related technical discussions were held with DOE and Yakama Nation representatives.

Ryan Miller, Washington State Department of Ecology (Ecology), had no comments to provide, but thanked Manuel for the presentation and Roberto for his comments.

Committee Discussion

Tom Sicilia thanked Manuel for the presentation and was glad to see waste leaving the river corridor. Regarding VPC augering, he asked if the homogenized material would be shipped to the Environmental Restoration Disposal Facility (ERDF) and the impression of the testing results. Manuel stated that not all resulting material would go to ERDF, only that which was low rated. Other material would be sent to the Central Waste Complex (CWC) or another facility. The goal of the testing was to get data on auger performance and the results were positive. The auger intended for use is larger in size than those currently used in the basin.

Chris Sutton, Public at Large, asked about work sequencing in between garnet filter removal and VPC augering. Manuel stated that VPCs could be done together, but space was needed for equipment before VPC debris could be removed.

Pam Larsen, City of Richland, remarked that the VPC effort sounded identical to the 618-10 project. She wondered if personnel from that project were on the team and providing knowledge or lessons learned. Mark French, DOE, confirmed that the same personnel that worked on and designed for 618-10 were working on the current VPC project to ensure the methods would work for the intended application.

Tom Galioto, Public at Large, noted previous mention of soil sampling and asked for details on how it would be done. Manuel was not certain of the intended methods but knew that samples would be taken from underneath the basin, and it would determine the depth of remediation to occur. Mark contributed, stating that basins would be removed prior to sampling and sampling would be used to determine levels and depth of contamination. Results from sampling would be used to determine the necessary cleanup levels to meet the associated Record of Decision

(ROD). It was not assumed that leaks were occurring in the K West basins, as they had in K East, but sampling would confirm.

Tom Galioto asked for further clarification on grouting, wondering if basins would be filled to match the existing water level based and if that was the intended final or permanent condition of the site. Mark stated that the basins would not be left in place. The grout would only be used to stabilize the remaining material in the basins prior to removal.

Tom Sicilia asked if samples would be collected from the walls of the basins in order to study concrete performance over time, recalling questions of wet concrete performance in high radiation. Manuel confirmed that samples were taken to confirm that the correct models were in place. Mark confirmed that the question of concrete performance was in relation to the Waste Encapsulation Storage Facility (WESF), and that sampling for that purpose would not be performed in the basins as the activity levels were not comparable.

Vince Panesko, City of Richland, asked about criteria for waste disposition to various facilities such as ERDF or CWC. Mark explained available waste characterization would be utilized in determining disposition locations. Clearly low-level waste, such as cesium with a low half-life, would go to ERDF. Known high-level waste or suspect transuranic (TRU) waste would be sent to CWC for further characterization downstream. As an example, suspect TRU waste designated for the Waste Isolation Pilot Plant (WIPP) would be radioassayed to determine if it met the appropriate criteria.

Liz Mattson, Hanford Challenge, asked what the deadline was for 105KW interim state storage. Mark stated that it was expected to be completed by the end of 2023 and the detailed schedule was in development. Central Plateau Cleanup Company (CPCCo) on task orders and milestones were undergoing renegotiation as the current milestones could not be met based on the current sequencing. She asked clarifying questions related to the initial timeline for a one-piece removal and the associated ROD. Mark stated that the work would be done under the existing ROD which did require one-piece removal in a set time, at which point the reactor core would be examined to determine if radiation has decayed to a point that it could be worked on and dismantled safely. He felt that one-piece removal seemed impractical, but the final decision in that regard would be made downstream.

Tom Galioto followed up on his previous question, asking about the level that the basins would be grouted to. Manuel clarified that the basins would be filled with grout and that the dose rates at the top of the basin would determine what level it was grouted to. Tom noted that he understood the dose rate issue, but felt that the adding grout, which would result in significantly more material that would eventually need to be remediated, seemed like a time consuming and expensive endeavor. Mark stated that he would have to check and see if the project team had worked to minimize that.

Tom Sicilia asked how liquid from the basins would be transported during dewatering. Manuel stated that tanker trucks were intended to be used and that two were ready for purchase.

Liz suggested that basin grouting would be a good project to share with the public, perhaps through Hanford Live. Tom Sicilia noted that lessons learned would be a good topic to pair with that.

Vince asked about the likelihood of hot fuel elements being found in the burial grounds being remediated, referencing previous incidents. Mark explained some of the history behind that incident and the work performed since. He was confident that all F Reactor fuel had been found and transferred for storage in the K Basins but stated that while he would “never say never” regarding something unexpected being found.

Next Steps

Tom Sicilia hoped to receive another update in approximately one year, prior to 105KW Basin dewatering.

Records of Decisions (RODs)

Tom Sicilia introduced the next topic: an update on the RODs that were presently under development.

Roberto Armijo served as presenter in place of Laura Buelow, EPA, who was leading the 100BC ROD. In June of 2021, she gave a briefing with the Deputy Assistant Administrator for the Office of Planning and Emergency Management on the 100BC ROD subject, along with the 100K Explanation of Significant Difference (ESD). They were also in the process of setting up briefings with the Deputy Administrator of the EPA. Recently, they held a listening session with Yakama Nation. It wasn't a full consultation due to EPA travel restrictions. He stated that for HAB inquiries on that subject, Laura Buelow could be contacted for information.

Craig Cameron, EPA, provided an update on the BP5-PO1. He has been helping to get through a related ROD on groundwater. With the two groundwater operable units, the focus areas were on migrating plumes, and as a result, had an Ecology regulatory lead. EPA was involved as well as the remedial authority. They were working toward getting the appropriate briefings set up with the Administrator of EPA and hoped to have a signature in place by the end of September 2021.

He explained that a couple years prior, Ecology came to EPA with idea that they would do another removal action similar to one being performed in the B Complex. The idea was that they would pursue an interim ROD due to the benefit of being able to focus on the migrating plumes and finalize later, after the source areas were better categorized. They set up a regional remedial review team in the absence of a remedial review board, effectively serving the same function and provided feedback in early stages. Technical staff were consulted and seemed pleased with where the effort was headed.

Concerns were raised regarding remediation north of Gable Gap, which is not part of the scope of that ROD, but they will work to address deficiencies in monitoring methods in that area.

Craig noted that this subject was presented as part of a recent Hanford 101 talk.

Committee Discussion

Tom Sicilia asked what the lead time for extraction well drilling would be once the ROD was approved. Craig was unsure of the kickoff date but noted that the construction was expected to take 1.5 years, and the work plan would be in place at least 180 days after the ROD was signed/In the meantime, the construction team would be procuring equipment. Kim Welsch, Ecology, contributed as project manager for BP5-PO1, noting that there were other sites that would need to be evaluated before construction which were in the process of undergoing condensed feasibility studies. Naomi Jaschke, DOE, confirmed that extraction wells were planned for fiscal year 2022, and ion exchange trains were under contract. They would evaluate what additional wells might be needed at the time.

Tom Sicilia asked about the projected timeline for the ROD in 200E. He wondered if Representative Analogous Site Coordinating Agency Liaisons (RASCAL) team digs would have fast turnaround times at DOE. Craig explained sites slated for remove, treat, dispose (RTD) actions could be performed using an observational approach, which would lessen the amount of up-front information required to proceed. In some cases, confirmatory sampling would be all that was required.

Chris Sutton asked how many waste sites were in the new operable unit. Craig stated that there were dozens, but he was unsure of the exact number. Kim contributed, stating that a one time it was in the range of 100 waste sites, but fluctuated based on information gathered based on individual waste sites, which sometimes resulted in reclassification.

Pam Larsen commented that she was encouraged by the presentations and the level of collaboration between agencies.

Environmental Restoration Disposal Facility (ERDF)

Tom Sicilia introduced the next presentation and provided background. In the prior Committee of the Whole (COTW), EPA mentioned concern related to clean fill being used around building debris in ERDF rather than contaminated soils, which resulted in a request by the HAB chair for an ERDF presentation to address those concerns and provide a project update.

Brian Setter, DOE, provided a presentation on ERDF, providing an overview of the facility, waste disposal activities, expected future waste, and potential facility expansion. ERDF served as a near-surface disposal site for Comprehensive Environmental Response, Compensation, and Liability Act Response (CERCLA) classified wastes, consisting of low-level and mixed low-level waste (LLW/MLLW). All waste disposed in ERDF was required to meet LLW or MLLW guidelines.

ERDF consisted of eight cells and two “supercells” that comprise the same area as two standard cells each and add an additional 2.8 million tons of storage capacity. Each standard cell was 500 square feet by 70 feet deep. To date, 18.7 million tons of waste was disposed in ERDF.

Waste delivery was performed utilizing trucks with roll-on/roll-off waste containers that met Department of Transportation (DOT) requirements. Waste profiles for disposed waste were

generated through waste characterization. Any waste that did not meet the LLW or MLLW criteria would be returned to the waste generator.

Space was designated to allow ERDF to potentially expand to three times its present size. Going forward, they would pursue a supercell approach and were pushing new a new supercell construction.

Regulatory Perspectives

Craig Cameron noted that, from EPA's perspective, he hoped to limit needless expansion and hoped to focus on efficient use of available space within ERDF. Additionally, EPA wanted to ensure that contaminated soil was lined up to serve as fill through the decision process. He noted challenges in getting timing lined up for that, as 100K would eventually be closed out and no longer serve as a source for contaminated soil and many other identified sources of contaminated fill were already accounted for.

Kim Welsch noted that he was personally not involved in ERDF-related work, but Ecology was in full support of Craig's efforts.

Brian noted that, regarding clean and contaminated fill, past decisions were not ideal. Efforts were being made going forward to stockpile clean soil separately and tracked. They were working with other waste sites and facilities across the Hanford Site to identify projects that could make use of clean soil, such as construction.

Committee Discussion

Pam Larsen thanked Brian for the presentation. She stated that she had enormous pride in ERDF, noting that other DOE sites struggle to get an on-site landfill established. She was proud of everyone that worked on the project.

Vince Panesko asked for clarification on the use of roll-on/roll-off containers, asking if contaminated soil would be sealed in the container and buried with it. Craig explained that containers were reused and that they were not buried, only their contents. Air monitors and processes were in place to prevent contamination spread and ensure worker safety. The roll-on/roll-off feature of the containers was to allow the containers to be staged pending disposal of the contents and allow trucks to continue operations. Waste with special requirements, such as waste from the Plutonium Finishing Plant (PFP), had a dedicated ramp with extra safeguards in place.

Jan Catrell, Washington League of Women Voters, referred to a previous discussion of ERDF being built vertically versus horizontally, and wondered about the results of those discussions. Brian confirmed that vertical expansion was occurring, as it was determined to provide costs savings and postponed the need for an additional supercell.

Chris Sutton asked about the necessary ratio of fill material versus debris in ERDF. Craig explained that the ratio was dependent on the size and shape of the waste material, but in general required a one-to-one ratio to provide compaction around the material. They did not want to allow void spaces that would affect long-term stability of the site. It was an engineering

requirement, rather than a regulatory one. In previous practice it was proven that this ratio would provide the necessary compaction.

Tom Sicilia noted discussion about the physical limits of space remaining in ERDF. He wondered if there were limits placed on specific radionuclides. Brian explained that there was a continuous performance assessment process in place, typically occurring every 5 years, that was performed to confirm performance and protection of groundwater and the public in relation to ERDF. He provided a link to the related documentation:

<https://pdw.hanford.gov/document/0083701>.

Tom Sicilia also asked if there were any topics in the two-to-four-year timeframe on which the present agency representatives might like to see actionable advice from the HAB, such as advice on 200-IA-1 sample sites. Craig thought that might be helpful from EPA's perspective. He considered the option of returning to discuss the RASCAL process and how decisions might be reached faster without compromising the work, to show that the agency could get work done and secure funding. Mark was unsure that such advice would have much utility, as there were a lot of upcoming RODs that would facilitate work.

Tom asked when a good time for EPA to return to discuss the RASCAL process might be. Craig stated that he would need to investigate that. Kim noted that it might be helpful for the HAB to write something in letter form, as it could potentially influence ongoing milestone negotiations.

Next Steps

Tom Sicilia stated that the committee would evaluate options for a letter or advice during committee business and that he appreciated the presentation.

Integrated Disposal Facility (IDF)

Brian Setter provided an additional presentation, this time focusing on the IDF to provide context for a current Resource Conservation and Recovery Act (RCRA) Class 3 permit modification being pursued through Ecology. The facility was intended to provide a disposal site for LLW and MLLW from the Direct-Feed Low-Activity Waste (DFLAW) Program and other appropriate Hanford Site-generated waste.

The initial construction phase was completed in 2006, which consisted of construction and permitting for Cell 1 and construction of Cell 2. The second phase of construction began in 2018, consisting of construction and modification of infrastructure to support DFLAW operations and appropriate RCRA permit modifications. The facility was located in the 200 East Area, in close proximity to the Waste Treatment Plant (WTP). Space was allotted for potential IDF expansion.

The project was presently undergoing modification that included earthwork for modification; construction of supporting facilities such as administrative and waste receiving and inspection buildings; leachate system installation; and RCRA permit modifications. A new dome cover was used for the leachate system; the previous floating cover was difficult to maintain due to biological vectors such as birds. The leachate system cross-connect received upgrades that would allow for maintenance when a tank was down.

The Active Life Class 3 Permit modification request included disposal of secondary solid waste from DFLAW and other Hanford-generated waste, along with addition of Cell 2 and storage and treatment pads. The Leachate System Class 3 Permit modification request included both leachate tanks and associated connection and ancillary equipment. Waste was intended to be prepackaged rather than delivered in bulk and would be contained in 55-gallon drums. The project was expected to be ready to receive waste by September 2022.

Regulatory Perspectives

Dan McDonald, Ecology, noted that they were pleased with the progress on the project and were in discussions on the related permit, doing what they could to ensure the project remained on schedule.

Committee Discussion

Tom Sicilia noted that the facility had been constructed and open to the atmosphere for a long time, a scenario that would likely provide an idea of how much leachate would be generated as a result of precipitation. He asked about how many truckloads of leachate would be transported out on a yearly basis, if that was the intended method to deal with leachate. Brian stated that, as part of future planning efforts, the project team was looking at how to deal with that. They considered a pipeline to the treatment facility like that present at ERDF, but it was not their primary focus due to the ongoing permitting effort.

Randall Havenor, DOE, provided perspective as project manager for IDF. They anticipated that it would require two trucks per week to transport leachate to the treatment facility and were ordering two tankers in case additional capacity was needed. In all scenarios they examined, it was determined that piping was the best option, but the project lacked the immediate resources, funding, and regulatory bandwidth to start that installation and required trucks in the interim.

Bob Suyama, Benton County, asked what material other than DFLAW-produced glass logs might be stored at IDF. Brian clarified that, in addition to vitrified waste, IDF would receive secondary items from the project support facilities, such as personal protective equipment (PPE) and high-efficiency particulate air (HEPA) filters from exchange columns. Bob also asked, based on the estimates of glass logs that IDF would receive, if they expected that new cells would be necessary for IDF. Brian stated that they did; new cells were accounted for in the IDF footprint, and they planned on maximizing the property available. Expansion would occur on an as-needed basis, utilizing lessons learned from ERDF.

Gerry Pollet, Heart of America Northwest, posed questions related to the facility permit. He noted that the permit has set limits of total contaminant burden, and wondered, with facility expansion, how the team would calculate and apply the modelling. Brian explained that the performance assessment was performed as if the facility was already at full expansion. The performance assessment fed into the waste acceptance criteria (WAC). Permit limitations account for the potential future expansion of the facility. The performance assessment, waste incidental to reprocessing, and other documents were updated periodically.

Vince Panesko noted that he heard that other Hanford waste was being considered for disposal at IDF, and therefore the performance assessment would need to change. He wanted to know when the last time the performance assessment was issued and when the next one would be available. Brian believed that the last one was published in 2018. Regarding accepting future waste, he expected that those requests would come in the future and would be evaluated at that time, which would trigger performance assessment revisions prior to disposal. Vince asked if the existing performance assessment had details on the expected waste such as HEPA filters or resins. Brian confirmed that those were factored in.

Jeff Burright, Oregon Department of Energy, asked about the status of the IDF WAC, wondering if it was expecting revision, who was involved, and if there was a public or regulatory component. Brian clarified that the WAC would have a complete version in place prior to start of operations. However, as the performance assessment was a living document, a change in the performance assessment could drive a change in the WAC. They worked with Ecology and EPA in document development and review. He stated that the document was submitted as part of the permit application and, as a result, should be available in the administrative record.

Jeff also asked about the cap design that would eventually be put on IDF, hoping to learn where the team was in the design process. He noted that he would like to hear a discussion on how caps or other measures might prevent drilling by others in the future. Brian stated that the design was conceptual and still being evaluated against alternatives but designed to a level that a contractor would have the information necessary to construct it. He noted that potential costs of cap solutions were being considered as part of the evaluation, considering the value of the caps versus using that money elsewhere in the Hanford cleanup effort.

Vince was curious to know how IDF would be distinguished from ERDF if the facility would expand the types of waste it would accept. Brian explained that the difference between the two facilities was based on the regulations associated with the waste types, RCRA for IDF wastes and CERCLA for ERDF wastes. Vince noted that differences between those two regulations are not clear to the general public. Dan McDonald reiterated that the performance assessment and WAC were based up what wastes were anticipated but did not preclude the possibility of needing to accept new waste. Brian continued, noting the possibility of waste characterization changing in process. Some legacy-style wastes may not need treatment or stabilization, and therefore would be qualified for ERDF instead.

Dan Solitz, Oregon Hanford Cleanup Board, asked if the loading order was determined, such as placing glass containers and solids in a certain sequence to keep caustics away from glass. Brian stated that there was an understanding of non-compatible wastes, so those would be separated. It was also known where additional fill or treatment would be required. Operational efficiencies and lessons learned would be applied. Randall added that there was ongoing discussion regarding the proximity of certain wastes next to glass and that they were working with engineering to determine the proximity and configuration. They recognized that there would be a lot of space to work with initially but wouldn't be true as operations moved forward into the future.

Vince asked if there was thought put into transport of melters to the site. Brian stated that route, vehicle type, and other considerations were already chosen, and road tests were performed. Each were examined for functionality, efficiency, and compliance, and were still evaluating other potential options that might better suit the mission.

Shelley Cimon, Columbia RiverKeeper, wondered what might be when waste was sent to Perma-Fix and results in a new waste form that does not fit existing WAC for various locations, or the potential for orphan waste streams. Dan explained that was not a possibility but not a certainty. Before generating waste, they always try to have a disposition path for the waste. They had a strong knowledge of the remaining waste on site and doubted that they would find something that they didn't know what to do with or couldn't handle. Ecology, contractors, and others did maintain conversations to address it as a potential, but there was no decision or determination that Perma-Fix would change the waste form.

Chris Sutton noted the number of decisions to be made and uncertainties around IDF. We wondered if it would still be on track to pass the operational readiness review (ORR) in late 2023 and start hot operations in the 2023 to 2024 timeframe. Brian thought that the biggest obstacle to achieving those milestones would be the permitting process, as it took the most time and could potentially be affected by comment periods. The project was, at that time, on track to have permitting completed by the end of 2022. All infrastructure and support facilities were completed, while the leachate system and dome were on track for completion. He expected to be ready for the ORR and subsequent hot operations.

Gerry felt that the committee discussion exposed an overall concern about the lack of information regarding waste forms, wastes intended for IDF, and treatment processes. He suggested that an educational program should be considered by DOE and felt there was too much uncertainty regarding what wastes IDF would contain or how it would be prioritized. Mark acknowledged the difficulty in understanding what they do but did not agree regarding the aspects of uncertainty. He explained that tremendous amounts of planning were done, which took a broad look at what might be generated or what could potentially be there in the future. They had a strong understanding of the possibilities and planned for them.

Open Forum

Tom Sicilia called for potential topics.

Vince Panesko noted that annual reports required by Tri-Party Agreement (TPA) milestones were expected to be released soon, and among them would be a groundwater report. He wanted to see a presentation from DOE on how groundwater plumes had changed, along with informational handouts to share with HAB member sponsoring agencies. Tom Sicilia noted that he hoped to request a groundwater session for the fall RAP meeting.

Chris Sutton stated that that topic fit into an aspect of the CPCCo scope of work that he was reviewing related to soil and groundwater remediation guidelines. It stated that CPCCo would work to integrate all cross-cutting activities related to monitoring, protection, and remediation of facilities, including leading strategic integration efforts, creating and maintaining integrated baseline project schedules, and other tasks. It then went on to discuss support for stakeholder and

regulator activities and mentioned that cross-cutting activities would be used in decision making. He wanted to understand in greater detail how that integration would work, how it would be used in decision making, and if that work drove work priorities. This topic of was particular interest as it was not part of the previous Central Plateau Contract scope.

Tom Sicilia noted that in earlier discussion on ERDF, some of the TPA agency representatives thought it might be a good idea for the Board to weigh in on the subject. Additionally, committee members expressed encouragement by TPA agency cooperation efforts during the ROD discussion, such as the success of the RASCAL teams in getting many waste sites completed quickly. He asked if there was any interest by the committee in pursuing, noting that the product did not necessarily have to be advice and could instead be something like a congratulatory letter. He stated it was not time critical and committee members should take time to consider the options.

Chris noted that the topic of carbon tetrachloride was in the RAP work plan and recalled a report by Virginia Rohay developed in the mid-2000s that looked at use of carbon tetrachloride on the Hanford Site, with interest in how much has been remediated from the subsurface versus how much went in.

Jan Catrell stated interest in new scope related to PFP site remediation, with focus on understanding what work remains following the completed slab-on-grade demolition. Vince also stated his interest on the subject.

Ryan Miller shared upcoming Hanford Live plans. Topics and dates would be shared for future HAB weekly updates.

Vince noted interest about revegetation efforts resulting from previous Hanford Site wildfires. Shelley Cimon contributed additional potential effects of climate change on Hanford Site cleanup and considerations to be made, suggesting that it could be a future topic. Tom Sicilia thought that could also potentially be discussed as part of end-states or COTW topics.

Committee Business

Tom Sicilia noted that this meeting would be the last chance for the committee to make draft HAB work plan additions or changes before it was voted on by the full Board for adoption. Ruth reviewed changes from the previous iteration. Committee members discussed wording of topics in the work plan and primarily agreed that the desired topics were covered.

Shelley Cimon noted the desire to attend a workshop in December, and if that was not possible, to “tap into” the workshop. Gary Younger agreed to follow up on the status of that request.

The committee arranged a rough outline for the November RAP meeting topics, which primarily consisted of groundwater-related topics, such as contaminant plume changes, carbon tetrachloride inventories, and the Composite Analysis.

Liz Mattson reminded committee members that the fiscal year 2023 budget comments were due to DOE on August 15, 2021.

Tom Sicilia announced that he was leading a HAB Self-Assessment IM team and invited members interested in joining to contact him.

Attachments

[Attachment 1: Meeting Agenda](#)

[Attachment 2: Draft Meeting Summary from RAP May 11, 2021 Meeting](#)

[Attachment 3: Getting Started with Teams Guide](#)

[Attachment 4: HAB Issue Manager Team List](#)

[Attachment 5: DOE Presentation - 100k Area Remediation](#)

[Attachment 6: DOE Presentation - Environmental Restoration Disposal Facility Overview](#)

[Attachment 7: DOE Presentation - Integrated Disposal Facility Overview](#)

[Attachment 8: FY2022 HAB Work Plan](#)

[Attachment 9: FY2022 HAB Calendar](#)

[Attachment 10: HAB Advice #308](#)

[Attachment 11: DOE Response to HAB Advice #308](#)

[Attachment 12: FY2022 RAP Draft Work Plan](#)

Attendees

Board Members and Alternates:

Shelley Cimon, Primary	Tom Galioto, Primary	Rebecca Holland, Primary
Emmitt Jackson, Primary	Pam Larsen, Primary	Liz Mattson, Primary
Gerry Pollet, Primary	Dan Solitz, Primary	Bob Suyama, Primary
Jeff Burrignt, Alternate	Jan Catrell, Alternate	Marissa Merker, Alternate
Mason Murphy, Alternate	Vince Panesko, Alternate	Tom Sicilia, Alternate
Chris Sutton, Alternate		

Others:

Kaycee Bailey, DOE	Dan McDonald, Ecology	Dieter Bohrmann, CPCCo
Kelly Ebert, DOE	Diana McFadden, Ecology	Patrick Conrad, HMIS
Mark French, DOE	Ryan Miller, Ecology	Dana Cowley, HMIS
Randall Havenor, DOE	Roberto Armijo, EPA	Cerise Peck, HMIS
Naomi Jaschke, DOE	Craig Cameron, EPA	Edward Dawson, HOC External Engagement

Manuel Lopez, DOE	Tom Rogers, Washington State Department of Health	Abigail Zilar, GSSC for DOE
Brian Setter, DOE		Annette Cary, Tri-City Herald
Geoffrey Tyree, DOE		Craig Larson
Gary Younger, DOE		Elaine McClymonds
		Gabriel Bohnee
		Linda Maiden
		Miya Burke
		Roger Quintero
		Tracy Barker
		Whitney Ball
		Scott Fillmon, HAB Facilitation Team
		Ruth Nicholson, HAB Facilitation Team
		Joshua Patnaude, HAB Facilitation Team
		Olivia Wilcox, HAB Facilitation Team

Note: Participants for this virtual meeting were asked to sign in with their name and affiliation in the chat box of Microsoft Teams. Not all attendees shared this information. The attendance list reflects what information was collected at the meeting.